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FINAL REPORT

Studies of Gamma-Ray Bursts Time Variability NAG 5-1901

Covering the Period March 1, 1992 through December 31, 1995

Submitted to

National Aeronautics and Space Administration Goddard Space Flight Center Greenbelt, MD 20771

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February 13, 1996

FINAL REPORT ON NASA GRANT: NAG5-1901 Bohdan Paczyński

The research project: "Models and Scenarios for Gamma-Ray Bursts" resulted in a total of 20 published research papers. The central issue was the distance scale to gamma-ray bursters, the issue brought up by the remarkable discovery of the distribution properties of gamma-ray bursts by the BATSE on Compton GRO. The last paper on the reference list (ref #20) is the PI's contribution to the debate on the distance scale to gamma-ray bursts held in Washington DC on April 22 1995. When this project got started, right after the announcement of the BATSE results at the conference in Annapolis in the fall of 1991, only a small fraction of astrophysicists seriously considered the possibility that gamma-ray bursts are at cosmological distances. By now the cosmological distance scale has become a majority view, to a large extent because of the publications listed in this final report. PI considers this to be the most important and lasting result from the research supported by this grant.

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